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PATENT & TRADEMARK OFFICE

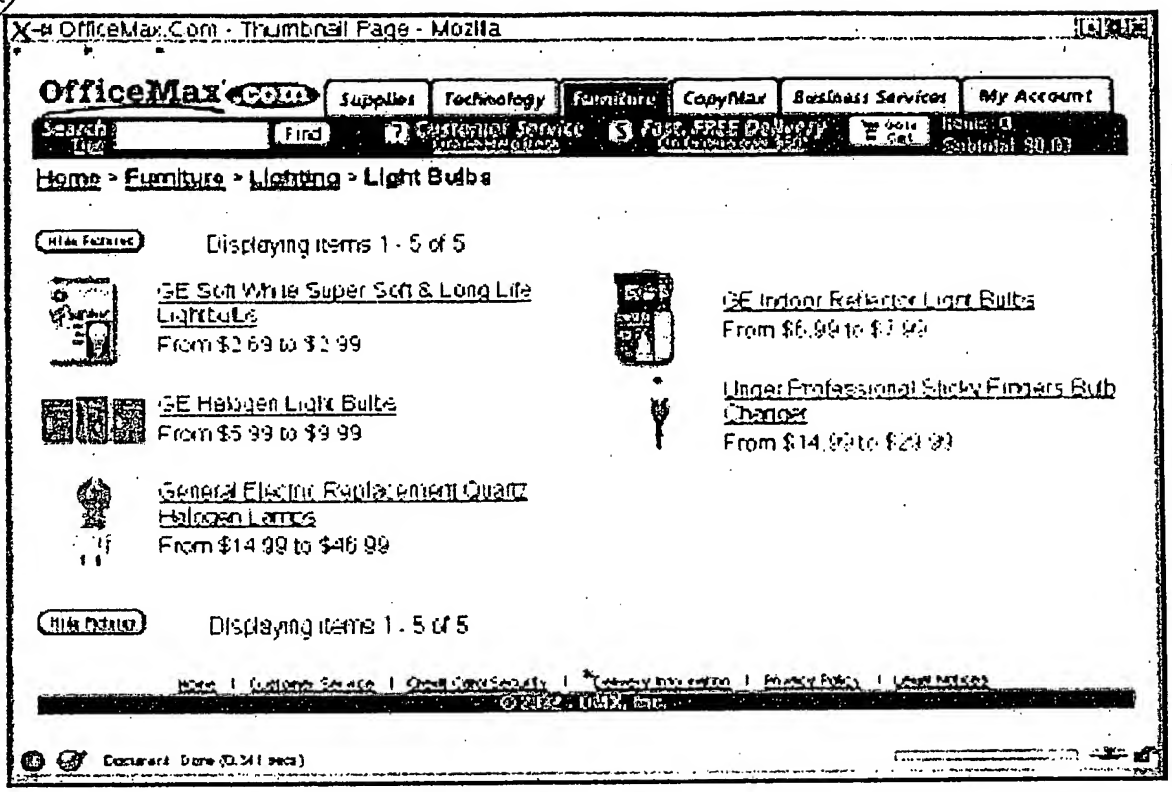

Figure 1

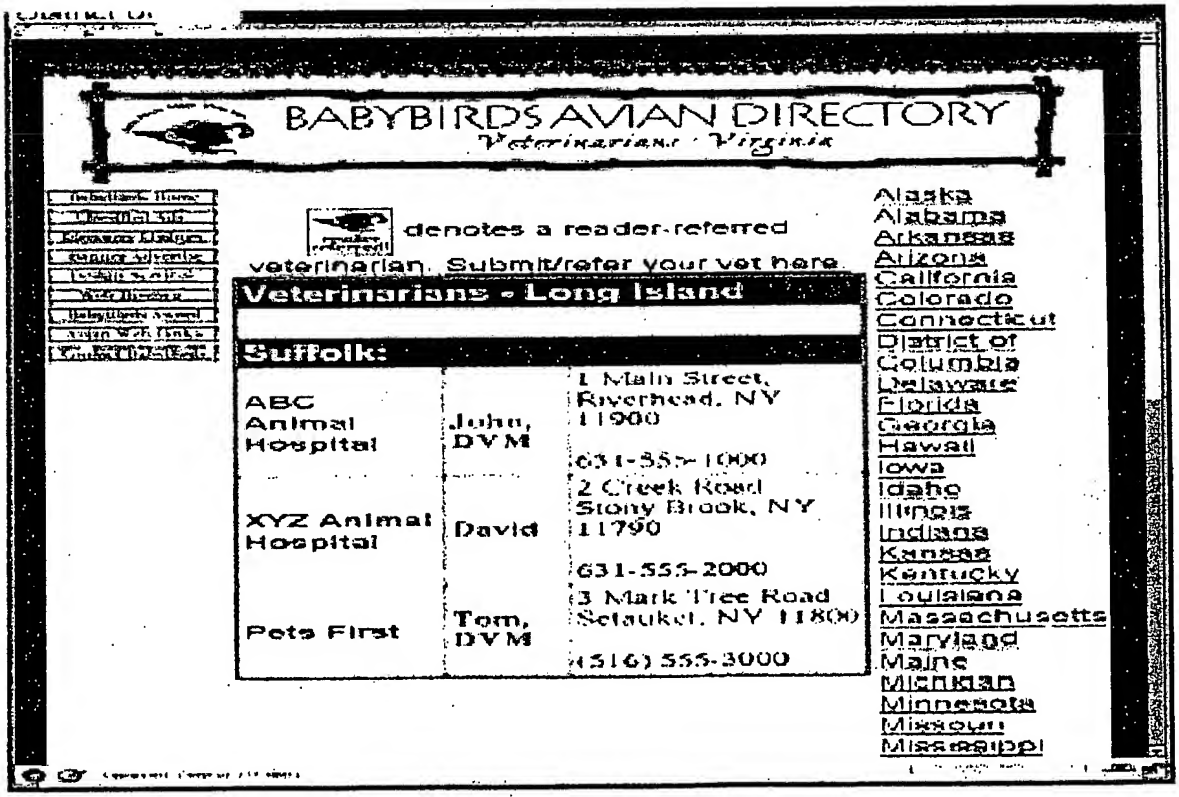

Figure 2

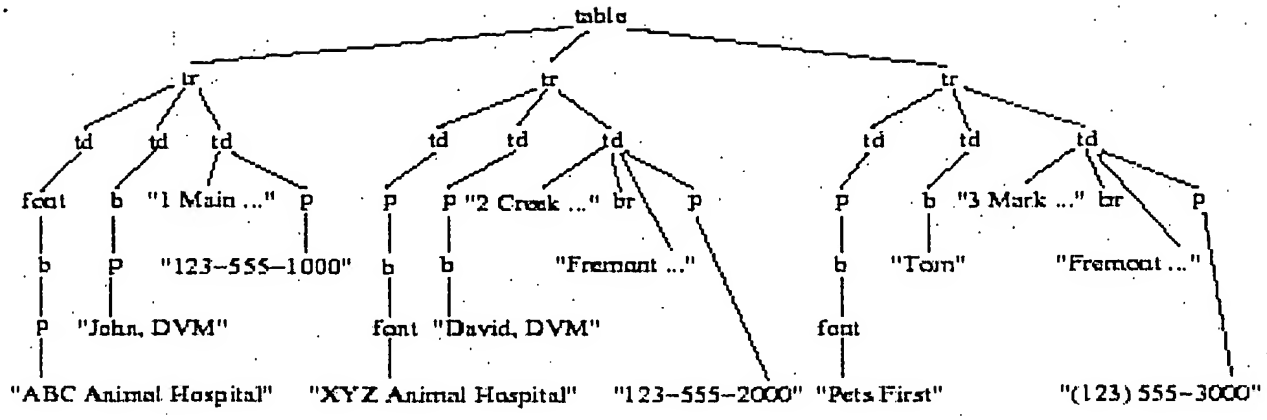

Figure 3

ontology(Veterinarian)={HospitalName, DoctorName, PhoneNumber}
Extractor(HospitalName)=<keywork,{hospital, clinic}>
Extractor(DoctorName)=<keyword,{DVM}>
ExtractorI(PhoneNumber)=<pattern,{[0-9]{3}-[0-9]{3}-{0-9){4}}>

Figure 4

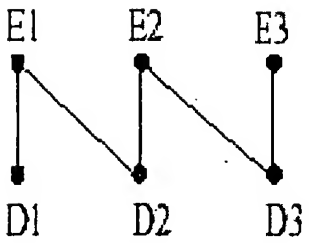

Figure 6A

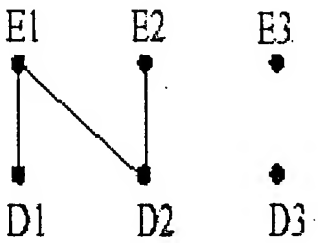

Figure 6B

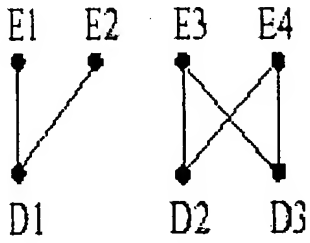

Figure 6C

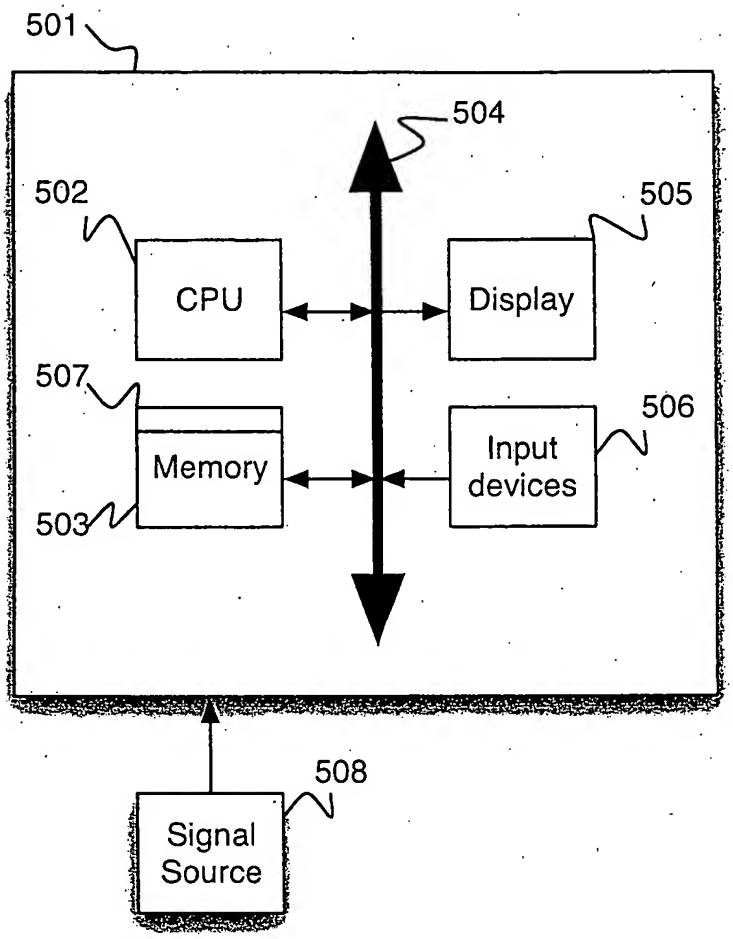
501
504
502
505
CPU
Display
507
506
Memory
Input devices
503
508
Signal Source

Figure 5

Attribute Name	Actual Present	Ontology Identified	Nonredundant PAE	Ambiguity Resolution
Hospital Name	2060	1667	420	1903
Phone Number	1841	963	101	1256
Doctor Name	1705	453	34	1000

Figure 7A

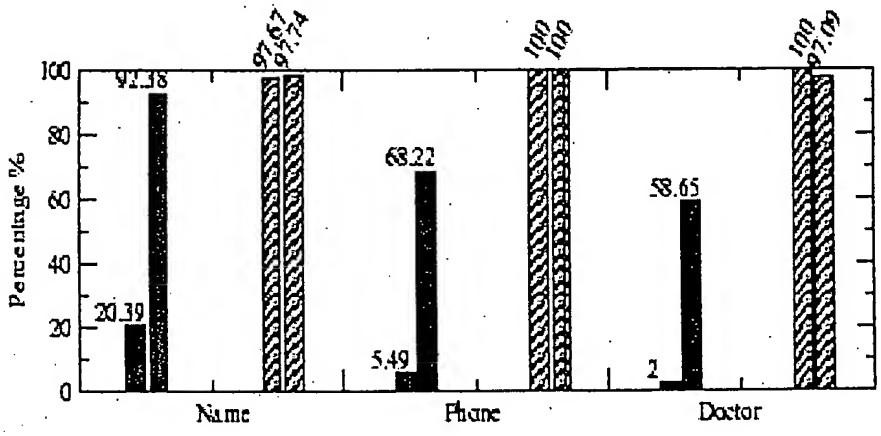

Figure 7B

Attribute Name	Consistent PAE #	Recall %	Precision %
Hospital Name	47	92.38	97.74
Phone Number	18	68.22	100
Doctor Name	7	58.65	100

Figure 8A

Attribute Name	PAE #	Actual Present	Ontology Identified	Consistent PAE	Recall %	Precision %
Hospital Name	47	338	287	294	86.98	97.35
Phone Number	18	111	47	100	90.09	100
Doctor Name	7	39	26	32	82.05	100

Figure 8B

Site	Attribute Name	Actual Present	Ontology Identified	Consistent PAE
KMart	Name	18	5	18
	Price	18	18	18
OfficeMax	Name	25	7	25
	Price	25	25	25
Staples	Name	112	31	99
	Price	112	112	99
Target	Name	63	19	63
	Price	63	63	63

Figure 9A

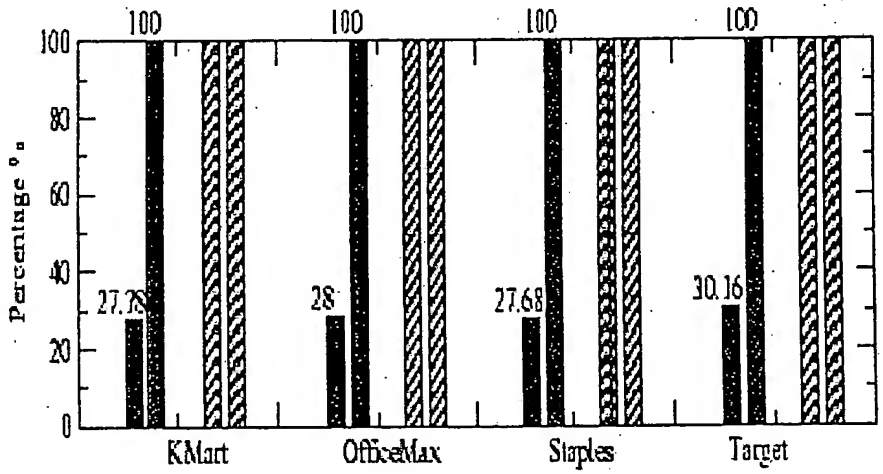

Figure 9B

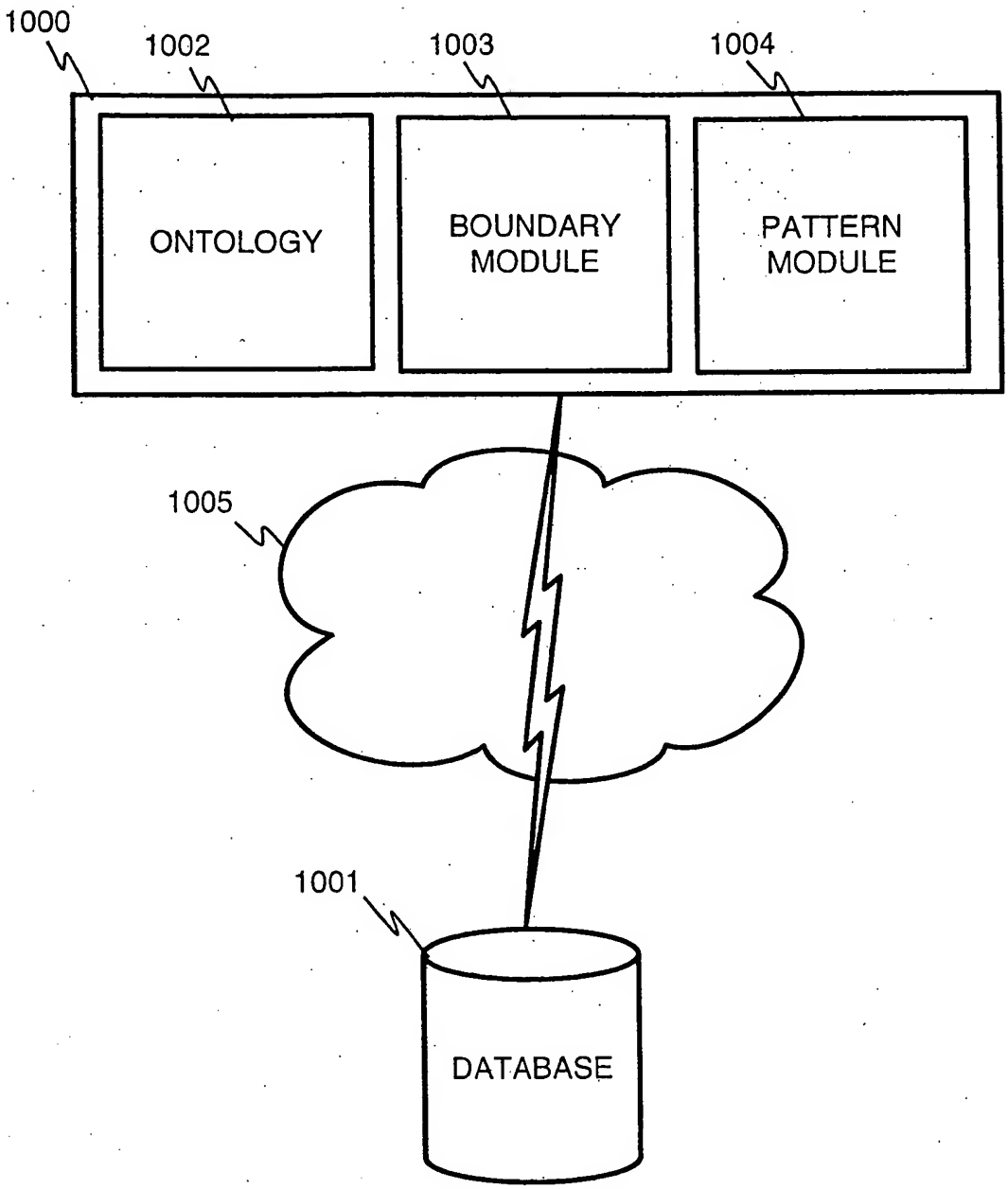
1000
1002
1003
1004
ONTOLOGY
BOUNDARY MODULE
PATTERN MODULE
1005
1001
DATABASE

FIGURE 10